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BELIZE

Trade and Investment Facilitation Program for Belize

(BL-L1040)

Economic Analysis Annex

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Introduction

Belize has a small and open, private sector-led economy, based primarily on tourism, agriculture, and other services. It is vulnerable to internal and external shocks, including natural hazards, resulting in a highly volatile GDP growth and a significant widening of the trade deficit. Belize´s pace of economic growth exceeded that of LAC economies in the 1980s, 1990s and the early 2000s. However, Belize`s real GDP average growth slowed from 4.7% between 2000 and 2009 to only 2.3% between 2010 and 2019, being the only country in Central America to register a decline in GDP per capita in the last decade. The pandemic has exacerbated the fragility of the Belizean economy, that has experienced chronic low economic growth. The pandemic led to a fall in tourist arrivals in 2020 and a decline in activity in contact-intensive sectors, resulting in a contraction of real GDP of 14%.

The tourism sector constitutes 39% of GDP, 40% of total employment and 42% of total exports in 2019. Foreign Direct Investment (FDI), mainly linked to the tourism sector, has been decreasing annually since 2014, except for 2018. In 2019, FDI declined 18% and a further 18.9% in 2020. Regarding trade, Belize has modest trade flows, with a Trade to GDP ratio of 54.7. Belizean exports are concentrated in few agricultural products and tourism destination. Both sectors have been dependent on trade preferences and few export markets, making them highly vulnerable to internal and external shocks. In the agriculture sector, there is a low complexity of the existing narrow export basket (4 products count for 60% of the official production value), and low firm-level technology absorption and capacity for innovation.

Despite the fact that the external sector is the key engine of growth for Belize, its export basket is comprised of goods typically exported by countries with lower degrees of income and is considered unsophisticated even when compared to other small states in the region with dominating service industries. Despite Belize having been the third LAC country to ratify the WTO Trade Facilitation Agreement (TFA), the implementation of trade facilitation measures has been slow, and activities to promote, facilitate and retain FDI in Belize have been deficient. Support for foreign companies located in the country, policy advocacy efforts, local linkages, and business intelligence are also limited due to underfunded BELTRAIDE. The country also lacks a digital single investment window (SIW), which would expedite business procedures, reduce paperwork, and allow to open business from abroad.

The strategy of the Program is to transform the external sector through diversification (attract more diverse FDI), integration (facilitate trade with neighbor countries) and innovation (promote positive spillovers of FDI) in a context of limited fiscal resources. Firstly, the operation will implement a digital single investment window, and electronic single window for trade, to facilitate trade and investment procedures while contributing to government transparency and efficiency. Secondly, interventions will be implemented to generate flows of FDI in key strategic sectors, chosen with the Government of Belize, and to promote their positive spillovers in the local economy through a linkage program, which at the same time will generate indirect exports and a base of export-ready companies.

The following economic analysis was undertaken to assess if the benefits of the program exceed its cost. It was not possible to perform a cost effectiveness analysis, because of lack of data. Therefore, this is a cost-benefit analysis. The analysis demonstrates that the increase in the FDI inflows associated with the program plus the target reductions to processing time, and costs for foreign trade will be reached, and so the economic returns to the stakeholders justify the investment in the development of an Electronic Single Window for Trade and Investment. With a discount rate of 12%, the project has a net present value of US$ 1.28 million and an economic rate of return (ERR) of 18.98% in a 8-year horizon.

A brief review of the Trade and Investment Facilitation Program for Belize

The general objective of this operation is to improve Belize's trade and investment performance. The specific objectives are to: (i) improve investment facilitation through simplification, standardization, and automation of key investment procedures; (ii) improve the investment promotion tools and SMEs internationalization through the strengthening of the trade and investment institutional apparatus; and (iii) improve trade facilitation through simplifying, standardizing, and automating key trade processes.

The Trade and Investment Facilitation Program consists of the following components:

- Component 1. This component will contribute to simplifying and automating key investment procedures through the implementation of the Single Investment Window and will finance: (i) Business Processes Reengineering and Normative Layer, including a Business Process Model and Notation mapping, simplification proposals, and drafting of decrees and/or laws; (ii) development of an operational layer including a proposal of an operational framework and governance (job manuals, work plan, and KPIs) of the SIW, capacity building and shadowing in execution, change management strategy and dissemination; (iii) technological development and implementation of key FDI processes on the SIW, integrating different platforms and ensuring sustainability considering Agile methodologies whenever possible (technological architecture, hardware and software, capacity building for maintenance and sustainability of the system), and including gender disaggregated data requests to provide data intelligence; and (iv) strengthening BELTRAIDE's operational management capacities for the deployment of the SIW, including additional support in business development and IT management. It will include recommendations for medium and long-term financial sustainability, in terms of both operational costs and capital investments.

- Component 2. Investment Promotion and Export Development (US$3.5M). This component seeks to increase the positive spillovers of FDI in the local economy through the improvement of investment promotion programs and the development of a new suppliers' program to accelerate SMEs internationalization, which will promote the growth of direct and indirect exports of the local firms in Belize. This component will finance: (i) FDI promotion programs (including lead generation, facilitation, and aftercare services) through the adoption of new digital tools, and institutional strengthening. It will include methodologies and mechanisms to ensure monitoring of results and adequate customer relationship management. The optimization of BELTRAIDE's processes will include the generation of gender-disaggregated data and its analysis; and (ii) Export development through the creation and implementation of a suppliers' development program. Activities will include: a capacity building strategy and action plan for BELTRAIDE to ensure sustainability of the intervention; development of an interactive online tool that contains information on suppliers; dissemination and activities to foster firms´ participation; individual gap analysis; and design and implementation of support interventions to strengthen firms' capacities (mentoring vouchers, workshops, match-making events, and

matching grants to upgrade capacities to supply tractor firms). The firm´s selection criteria will incorporate additional points for women-led or owned businesses.

- Component 3. Trade Facilitation (US$1.2M). This component will contribute to reducing delays associated with administrative trade procedures by strengthening trade facilitation. As part of the first phase of implementation of a Foreign Trade Single Window, this component will finance: (i) business process re-engineering to ensure that trade processes are optimized and aligned with international best practices, (ii) deployment of a Licenses, Certificates, and Permits (LCP) module that will serve as the single-entry point and management system for all import and export LCPs issued by participating agencies, which will include the generation of gender disaggregated reports. The consultancy for this activity will elaborate recommendations for medium and long-term financial sustainability of the ESW both for operational costs and capital investments in accordance with the technical work developed by the Caribbean Development Bank; and (iii) enhancement of IT equipment to facilitate the migration to a paperless environment and use of the system.

- Other costs (US$0.8M).

The results indicators associated with the first specific development objective of improving investment facilitation through simplification, standardization and automation of key investment procedures will be measured through the change in: (i) average time (number of days) to obtain an investment concession, (ii) number of investment processes simplified through the SIW, and (iii) number of institutions to be involved in the SIW during the duration of the project. The second specific objective of improving the investment promotion tools and SMEs internationalization through the strengthening of the trade and investment institutional apparatus will be measured via (i) percentage of international investors/companies assisted by BELTRAIDE that establish a company in Belize during the duration of the project, (ii) number of leads handled by BELTRAIDE during the duration of the project, (iii) number of companies supported by BELTRAIDE that report exports (direct or indirect) for the first time during the duration of the project, *(iii)(a) Number of companies supported by BELTRAIDE that report exports (direct or indirect) for the first time and that are led by women during the duration of the project* and (iv) number of companies supported by BELTRAIDE during the duration of the project, *(iv)(a) a Number of companies supported by BELTRAIDE that are led by women*. Lastly, the specific objective of improving trade facilitation

through simplifying, standardizing and automating key trade processes will be measured by the (i) average time (number of hours) for export documentary compliance. The beneficiary population for Component 1 are: (i) investors that will require administrative processes, including the current 75 concessions holders; and (ii) stakeholder agencies from the participating agencies (e.g., Tourism, Agriculture or BPOs). Component 2, beneficiaries include: (i) investors and potential investors based on the 770 leads that will point to investments; (ii) local SMEs that seek to export from a potential 1,035 medium and large firms in the country with a special focus on women-led companies; and (iii) BELTRAIDE. Lastly, Component 3 will benefit: (i) 200 companies that seek to export; (ii) importers; and (iii) public institutions including Customs, the Ministry of Foreign Affairs, Ministry of Foreign Trade, and regulatory agencies that are responsible for issuing permits, licenses, and certificates (OGAs such as the Agriculture Ministry, the Police Department, Health Ministry, among others).

The three components include the implementation of mechanisms for tracking and monitoring data (SIW, CRM, and ESW)

II Methodology

The international literature review shows that Estonia is a recognized international case for digital government. It achieved a reduction in time for setting up a business from 35 days in 2007 to 3.5 days in 2020, according to the Doing Business. In Costa Rica, under the SIW implementation, the time for service companies to access the Free Trade Zone regime was reduced from 405 to 45 days.

Component 1 is complementary to the component 2 initiative. In other words, Component 1 aims to establish the environment for the Single Investment Window (SIW), while Component 2 seeks to maximize its benefits. Component 3 has the goal to contribute to reducing delays associated with administrative trade procedures by strengthening trade facilitation, specifically dealing with exports. Therefore, the present economic study will base the measurement of the economic impact on the implementation of the Investment and Trade Single Window.

Taking into account that the main objective of the program is to make and implement a Single Investment Window (SIW), and the Trade Single Window, the introduction of some facilitation of

trade practices, and the introduction of the new investment promotion techniques, the project will be evaluated on the basis of the time savings due to the implementation of the project. We do not have access to time data of processing the export permits, so we have to approximate to that effect through the data collected for the construction of the results matrix and several assumptions.

An ex ante evaluation estimates whether the expected net social benefits of the project exceed the cost of the funds used. The discounted net benefits B is the sum of the net impacts on each of the individuals with and without the project, $bi,t\text{with}$ and $bi,t\text{without}$, respectively. Obviously, it is calculated taking into account its effect over time, with a social discount rate r; so it all comes down to the formula:

The benefit of the program in the year i (B_i^i) would be the additional exports generated as the direct consequence of the trade facilitation activities (Component 3) and also the additional exports indirectly generated as additional foreign direct investment attracted as a consequence of the single investment window and the investment promotion activities (Component 1 and 2). In mathematical terms:

$$B = E\left[\sum_t \sum_i \frac{[b_{i,t}{}^{with} - b_{i,t}{}^{without}]}{(1+r)^t}\right] \qquad (1)$$

On the other side, the project costs are the discounted sum of the direct costs necessary for the project to be carried out.

$$C = \sum_t \sum_j \frac{c_j}{(1+r)^t}$$

The alternatives to consider are with and without the project.

In this study, the alternative without project, or simply "WITHOUT", will be understood essentially as the sequence of scenarios in which: Belize continues to do what it would do anyway, in terms of foreign investment and trade, but without Single Investment and Trade Windows and with lesser services than those offered by the project in terms of attention to foreign investors.

In contrast to the WITHOUT alternative, the alternative with project, or simply called “WITH”, is the base scenario of the project proposal. In it, the establishment of the Single Investment and Trade Windows and also the coordination process between agencies is accelerated, especially between sectoral agencies. In addition, all the benefits are rushed compared to the WITHOUT scenario. By the way, the WITH alternative includes the presence of a more intensive process of promotion of investment and of an appropriate mechanism to follow up on contacts made with them.

The benefits to be quantified will be those that have to do, in line with the POD and the results matrix, with savings in time. Conservative values are assumed for this, in order to bias the social IRR to be calculated downwards. The analysis does not assess the benefits of reducing payments and documents, but the effects on investment will be assessed, assuming an elasticity between reducing time procedures and investment.
Unfortunately – given the time of the evaluation – it was not possible to have microdata on transactions for the Custom Agency or for the Beltraide, so we have to make assumptions.

Costs are estimated from the project budget, that is, the Budget Execution Plan (PEP) and the Annual Operating Plan (POA).

The assumptions of each one of the costs and benefits will be detailed in the following sections. The discount rate is r=12%, according to the current IDB standard.

II Economic Benefits

This section defines how each parameter from those established in equation (1) was calculated.

The list of benefits ${b_{i,t}}^{with} - {b_{i,t}}^{without}$ comes from at least the following aspects:

- Direct savings due to time saved both in investment processes and in foreign trade, and probably also fewer paperwork, travel expenses to carry out the paperwork. The companies also give a relevant value to the predictability of time and the possibility of being able to initiate procedures in a timely manner, for example, when one procedure requires successive ones. In this item we will consider three types of procedures and cost

reductions as a whole: (1) Simplification and even elimination of procedures for investors; (2) reduction of processing and waiting times in some procedures. Next come (3) the indirect benefits of reducing paperwork by improving the interconnectivity of other programs. This savings apply to all investors and exporters of Belize.

- New investors and new exporters caught by the program.

From the investment side, and in line with the results matrix:

1) Time saved. We considered the average number of days from the submission of request of permit or license up to obtain the fiscal incentive concession, which is a tax exemption up to a maximum of 15 years, depending on the sector, to incentive investors to complete their transaction. According to BELTRAIDE, WITHOUT the project, on average the concession is granted in 3 to 6 months. Due that the exact calculation will be determined as part of the BL-T1139 during the kickoff workshop, for this study we consider 3 months to be conservative in estimating project benefits. In Costa Rica, similar processes take 7 days through their window. As Costa Rica has higher experience with simplifying processes and based on Belize's window's stage of maturity, we expect this process to take at least twice as long (14) in the WITH project scenario.

2) Beneficiaries Companies. As the results matrix shows, a firm will be considered as established in the country if it performs one of the following activities: (i) has started the process to be registered in the country; (ii) has signed a lease; or (iii) has started recruiting personnel. WITHOUT the project, BELTRAIDE registers only the firms that request the investment incentive. BELTRAIDE reported having supported 38 active FI Concession Holders and 40 active DPA Concession Holders, giving a total of 78 beneficiaries companies. As part of the project, WITH PROJECT, it is expected to attract 14 additional enterprises in the 5 years of the disbursement of the program.

3) Amount of additional investment. Harding and Javorcik (2011) collected data on 124 countries to examine the effects of investment promotion and investment facilitation tools on inflows of US foreign direct investment (FDI). Harding and Javorcik test whether sectors explicitly targeted by investment promotion agencies in their efforts to attract FDI receive more investment in the post targeting period relative to the pre-targeting period and non-

targeted sectors. The results of their analysis are consistent with investment promotion leading to higher FDI flows to countries in which red tape and information asymmetries are likely to be severe. The analysis also suggest that investment promotion and single investment windows initiative works in developing countries. Harding and Javorcik (2011) also found that in the post-targeting period, priority sectors in developing countries tend to receive 155% higher FDI inflows (page 27 and column 4 in Table 7 of the article). The magnitude of the effect may seem large, but is plausible since many sectors experience zero and close to zero inflows. The authors said that in their database the median value of FDI inflow in the developing country subsample is $11 million. Thus, the estimated 155% increase would mean an additional annual inflow of $17 million for the median sector-country observation. In the case of Belize, for the year 2021 the median value of the FDI inflow is $12.3 million, a figure extremely close to that reported by Harding and Javorcik as the median value of FDI inflow. Thus, we assume that with the implementation of Component I and Component II, the country will reach the figures estimated by Harding and Javorcik in the literature for each new company that settles in Belize.

4) Regarding the benefit in USD dollars per day saved, we are going to assume for Belize an average of the hourly value that has been used in Peru and Chile, which gives 58 USD/day/company. Here we explain Peru first. According to the work of Calmet and Capurro (2011), the benefit in USD dollars per day saved in Lima was 8 PEN/hour worked in 2007, which is approximately 2.5 USD/hour that year. Assuming 2% annual inflation in dollars over the last decade, that would be equivalent to 3.1 USD/hour. Thinking that a day has 8 working hours, we are talking about 25 dollars per person per day. Since the the average number of employees in companies from 0 to 5 years is 2.6; That leaves us with a daily value in time per company of 65 dollars, only for employees. As an alternative source of benefit in USD dollars per day saved we are going to consider the social value of the time used in Chile in 2016 (Ministry of Social Development, 2016) which corresponds to 1,600 CLP/hour. In this year's dollars it is 2.5 USD/hour. Following a calculation analogous to the one in the case above, it would be 52 USD/day/company. The average of both countries would be 58 USD/day/company.

Regarding the trade facilitation component:

1) Time saved. According to the Doing business, Trading across borders, Indicator Time to export, Documentary compliance, Belize took 38 hours for this process in 2019. This is also confirmed by the OECD trade facilitation indicator. Based on evidence cited in Volpe Martincus, C. (2016) it is expected that WITH project that the number of hours required to prepare these documents will be 40 percent lower in countries with trade single window schemes.

2) Beneficiaries Enterprises. WITHOUT program 0 enterprises will be supported by BELTRAIDE. WITH program the number of companies that received support by BELTRAIDE, we estimated 40 companies participating. Of those 40 companies and based on other experiences, we expect for at least 50% of companies supported by BELTRAIDE to achieve the goal of concrete its first export.

3) And for the beneficiaries of the reduction in time processing of exports, according to the 2016 Business Establishment Survey, there are approximately 7,975 enterprises in Belize from which 5,374 are micro; 1,565 are small; 477 are medium; and 558 are large companies (Statistical Institute of Belize). We assume that the potential beneficiaries of the program are all the medium enterprises and a half of the small enterprises (approx. 1.200).

4) Amount of additional exports. WITH the application of the program, the Export Facilitation activities will be seeking to diversify the baskets of exports. Volpe Martincus and Carballo (2010) found for Chile that the export promotion generates an increase of 7% on exports. For this study, assuming that Belize has a significantly weaker institutional framework than Chile, it is assumed a quarter of the impact estimated by the literature, 1,75% increase on non-traditional sectors. Volpe Martincus and Carballo also show that the export promotion activities have more impact on the extensive margin than in the intensive margin. So, to achieve the increase of 1% in the exports in value, we have to assume an increase in the firms that export. Currently, only 6.5% of the firms established in Belize exports. After the program, we expect to increase firms' probability of exporting by 2.3pp, following Cruz (2014), an increase of 8.8% of firms exporting.

II.1 Data for the calculations of the benefits of the Program

1) Exports

In the period 2016 - 2021, non-traditional exports of goods (Other Exports) show a very negative evolution. The following table summarizes the data about the evolution of the exports in Belize.

Table N°1 Exports of domestic exports by products (2016-2021) in thousands of US dollars

	2016	2017	2018	2019	2020	2021
Sugar	102.976	147.874	112.093	136.316	108.012	126.901
Molasses	6.970	9.048	6.610	10.911	12.371	14.736
Banana	69.536	83.439	74.354	77.852	86.992	90.980
Citrus Juice	67.116	57.335	54.973	43.303	37.614	30.354
Marine Products	43.034	40.797	41.849	48.772	39.175	52.987
Petrolum Products	22.483	22.746	24.649	20.325	4.890	8.586
Papaya	3.922	1.453	1.025	267	406	639
Other	65.074	76.259	69.712	69.800	69.477	96.651
Total	**381.112**	**438.950**	**385.264**	**407.545**	**358.938**	**421.834**

Source: Central Bank of the Belize.

Table N°1 shows that over a period of six years, 2016-2021 exports have practically remained at the same level, the values of 2021 being somewhat higher than those of 2016-2020. Its seems clear that Belize has a huge opportunity in this area, at least to consolidate the figures seen in 2021.

Given this evolution, it is an optimistic assumption that without a program, non-traditional exports (other exports) will remain at their average level of the period 2016-2020. This will be the demanding assumption for the evolution of non-traditional exports without the application of the program.

2) Foreign Direct Investment inflows

In the period 2016-2021 the inward foreign investment has the following evolution:

Table N°2 FDI Inflows (in Millions of USD)

	2016	2017	2018	2019	2020	2021
FDI Inflows	110	172	149	167	60	80,82

Source: IMF database

As shown in table 2, the income of FDI has a very erratic pattern in Belize, especially in the non-traditional sectors.

Harding and Javorcik (2011) collected data on 124 countries to examine the effects of investment promotion and investment facilitation tools on inflows of US foreign direct investment (FDI). Harding and Javorcik test whether sectors explicitly targeted by investment promotion agencies in their efforts to attract FDI receive more investment in the post targeting period relative to the pre-targeting period and non-targeted sectors. The results of their analysis are consistent with investment promotion leading to higher FDI flows to countries in which red tape and information asymmetries are likely to be severe. The analysis also suggest that investment promotion and single investment windows initiative works in developing countries.

Harding and Javorcik (2011) also found that in the post-targeting period, priority sectors in developing countries tend to receive 155% higher FDI inflows (page 27 and column 4 in Table 7 of the article). The magnitude of the effect may seem large, but is plausible since many sectors experience zero and close to zero inflows. The authors said that in their database the median value of FDI inflow in the developing country subsample is $11 million. Thus, the estimated 155% increase would mean an additional annual inflow of $17 million for the median sector-country observation.

In the case of Belize, for the year 2021 the median value of the FDI inflow is $12.3 million, a figure extremely close to that reported by Harding and Javorcik as the median value of FDI inflow. Thus, as it was said above, we assume that with the implementation of Component I and Component II, the country will reach the figures estimated by Harding and Javorcik in the literature.

In the following chart we list the main assumptions used in this cost-benefit analysis:

Variable	Literature	Assumption
Exports	Volpe Martincus and Carballo (2010) (Increase of 7%)	Increase of 1,75% from the fourth year, a quarter of the effect estimated by Volpe Martincus and Carballo (2010)
FDI	Harding and Javorcik (2011) (An additional annual inflow of $12,3 million for the median sector-country observation)	Increase of a quarter of the effect estimate by Harding and Javorcik from year 4 to year 5 and half of the effect from year 6 to year 8

Source: Own Elaboration

Sector composition of the FDI

The analysis of the benefits of the project will vary depending on the sectoral composition of the additional FDI that is captured through the program. Initially, we will assume that the FDI will maintain its current sector structure. The Central Bank of Belize provide us information on flows, origins, destinations and sectoral orientation of FDI for the period 1999-2021. We sum all the annual data and estimate the average distribution for the period 1999-2021.

The next table summarize the data.

Table N°3 FDI Inflows and Weight

Sector	Average 1999-2021 FDI Inflow	Weight
Agriculture, Hunting, Forestry and Fishing	5,98	7,40%
Mining and Quarrying	4,21	5,21%
Manufacturing	0,74	0,91%
Electricity, Gas and Water supply	3,52	4,36%
Construction	11,00	13,61%
Trade and Repair	0,71	0,88%

Hotel and Restaurant	17,80	22,03%
Transport, storage and Communications	2,59	3,21%
Financial Intermediation	10,03	12,41%
Real Estate Activities	17,40	21,53%
Computer and Related Companies	0,00	0,00%
Education	0,00	0,00%
Health and social Work	0,13	0,16%
Miscellaneous	6,70	8,29%

Source: Own elaboration based on Central Bank of Belize.

Now we have all the data and assumptions to estimate the benefits of the program.

Table 4.1 Data for calculation of the benefits of the program (millions USD dollars)

Investment		
1) Benefits for all the investors (dollars)		
a) Time Saved	76	A reduction from 3 months to 14 days (see results matrix). 90 days - 14 days= 76 days
b) N° Enterprises	89	All the enterprises that have incentives and the new enterprises caught. Currently, BELTRAIDE registers only the firms that request the investment incentive; however, they do not register the number of companies conducting an investment transaction. BELTRAIDE reported having supported 38 active FI Concession Holders and 40 active DPA Concession Holders. Based on Costa Rica´s results (Volpe, Carballo & Blyde) a 14% increase of enterprises is expected
c) N° of Process	4	Initial diagnosis from the Investment Policy and Compliance Unit identified about 55 processes related to the business environment. However, none of them are currently digitalized. BL-T1139 will finance a mapping to determine which processes pertain to the SIW. As part of the pilot, the project expects to integrate at least the following processes into the SIW: (i) register the company, (ii) Trade

Investment		
		License application and approval process, (iii) simplify immigration documentation, and (iv) obtain fiscal incentives.
d) Benefit in USD dollars per day saved	58	we are going to assume for Belize an average of the hourly value that has been used in Peru and Chile, which gives 58 USD/day/company
	1.569.248	a) x b) x c) x d)
2) Benefits generated by new investors attracted through the Program (millions USD)		
e) New enterprises x year	1,75	(Volpe, Carballo & Blyde) a 14% increase of enterprises is expected (14)
f) FDI Inflow x project (millions USD)	12,3	Harding and Javorcik
f.1) FDI Inflow year 3 to 5 (millions USD)	1,5375	Increase of a quarter of the effect estimate by Harding and Javorcik from year 3 to year 5 (f)/8)
f.2) FDI Inflow year 6 to 8 (millions USD)	3,075	Increase of half of the effect from year 6 to year 8 (f)/4)
g) Weight	25%	Corrective factor since some investment would be made anyway beyond the project
New investments year 3 to 5 (millions USD)	0,67	e) x f1) x g)
New investments year 6 to 8 (millions USD)	1,35	e) x f2) x g)
3) Benefits for all the exporters and importers		
h) Time saved	1,9	Results Matrix. Reduction 38 hrs - 23 hrs= 15 hrs (1,9 days)

Investment		
i) N° Enterprises	1.200	According to the 2016 Business Establishment Survey, there are approximately 7,975 enterprises in Belize from which 5,374 are micro; 1,565 are small; 477 are medium; and 558 are large companies (Statistical Institute of Belize). We assume that the program applies for all the medium enterprises and a half of the small enterprises (approx. 1.200).
j) Benefit in USD dollars per day saved	58	we are going to assume for Belize an average of the hourly value that has been used in Peru and Chile, which gives 58 USD/day/company
k) Number of institutions implied	4	The project expects to at least integrate the following institutions into the SIW: (i) Belize Companies & Corporate Affairs Registry and Corporate Affairs (ii) San Pedro Town Council (iii) The Ministry of Foreign Affairs, Foreign Trade, and Immigration ,(iv) Ministry of Economic Development and Finance (MEDFI)..
Benefits for all the exporters and importers	528.960	h) x i) x j) x k)
4) Benefits for additional exports associated with the program		
l) Number of Companies supported by BELTRAIDE that report exports for the first time	20	Results Matrix
m) Average export by first time	17.000	Data provided by Belize Central Bank
	340.000	l) x m)

Source: Own elaboration based on estimation.

Table 4.2 Benefits of the program (millions USD dollars)

	1) Time Saved by Investors	2) New Investment	3) Time saved by exporters and importers	4) Additional exports	Total Benefits
2023	0	0	0	0	0,00
2024	0	0	0	0	0,00
2025	0,00	0,00	0,00	0,00	0,00
2026	0,78	0,67	0,26	0,17	1,89
2027	0,78	0,67	0,26	0,17	1,89
2028	0,78	1,35	0,53	0,34	3,00
2029	1,57	1,35	0,53	0,34	3,78
2030	1,57	1,35	0,53	0,34	3,78

Source: Own elaboration based on estimation.

III Economic Costs

The project is to be financed with a US$ 8,0 million loan. It will be disbursed over 5 years as indicated below. Disbursements by year were estimated from the draft Project Execution Plan at the time of analysis.

The project also includes recommendations for medium and long-term financial sustainability, both for operational costs and capital investments.

Total economic costs of the project are therefore estimated as follows:

Table 5 Expected Costs
(in US dollars)

Components	2023	2024	2025	2026	2027	Total
Component I: Facilitate investments in Belize through the implementation of a SIW	$ 205.000	$ 335.000	$ 1.005.000	$ 755.000	$ 200.000	$ 2.500.000

Components	2023	2024	2025	2026	2027	Total
Component II: Export Development and Investment Promotion	$ 361.250	$ 1.166.500	$ 789.750	$ 696.000	$ 486.500	$ 3.500.000
Component III: Trade Facilitation	$ 130.000	$ 385.000	$ 492.500	$ 192.500	$ 0	$ 1.200.000
Other costs: Project Implementation Unit (PIU), audits, mid-term, and final evaluation	$ 124.000	$ 149.000	$ 179.000	$ 149.000	$ 199.000	$ 800.000
Total	$ 820.250	$ 2.035.500	$ 2.466.250	$ 1.792.500	$ 885.500	$ 8.000.000

Source: Own elaboration in base of the information of - Financial Execution

IV Economic Returns

With a discount rate of 12%, the project has a net present value of US$ 1,28 million and an economic rate of return (ERR) of 18,98% in a 8-year horizon.

Table 6 Economic Return of the Program
(in millions of US dollars)

	2023	2024	2025	2026	2027	2028	2029	2030
1) Time Saved by Investors	0,00	0,00	0,00	0,78	0,78	0,78	1,57	1,57
2) New Investments	0,00	0,00	0,00	0,67	0,67	1,35	1,35	1,35
3) Time saved by exporters and importers	0,00	0,00	0,00	0,26	0,26	0,53	0,53	0,53
4) Additional exports	0,00	0,00	0,00	0,17	0,17	0,34	0,34	0,34
Total Benefits	0,00	0,00	0,00	1,89	1,89	3,00	3,78	3,78
Costs	0,82	2,04	2,47	1,79	0,89	0,00	0,00	0,00
	-0,82	-2,04	-2,47	0,10	1,01	3,00	3,78	3,78
NPV(12%)	$ 1,28							
ERR	18,98%							

Source: Own elaboration in base a estimation

V Sensitivity analysis

For the purposes of performing a sensitivity analysis of the results obtained, we will proceed to assume reductions in the key assumptions used in estimating the economic results. The key assumptions for the results obtained in section IV are: 1) the time saved by investors, 2) the new investments associated to the program, 3) time saved by exporters and importers, and 4) the additional exports generated by the program. So, in this section we will change these assumption to lower levels for the purposes of analyzing the robustness of the results obtained in the previous section.

We construct the following performance of the key parameters of the exercise for the estimation of the new four scenarios.

Variable	I	II	III	IV
1) *Time saved by investors*	Reduction of 5% with respect to the value of the base year	Reduction of 10% with respect to the value of the base year	Reduction of 15% with respect to the value of the base year	Reduction of 20% with respect to the value of the base year
2) New Investments	Reduction of 5% with respect to the value of the base year	Reduction of 10% with respect to the value of the base year	Reduction of 15% with respect to the value of the base year	Reduction of 20% with respect to the value of the base year
3) Time saved by exporters	Reduction of 5% with respect to the value of the base year	Reduction of 10% with respect to the value of the base year	Reduction of 15% with respect to the value of the base year	Reduction of 20% with respect to the value of the base year
4) Additional exports	Reduction of 5% with respect to the	Reduction of 10% with respect to the	Reduction of 15% with respect to the	Reduction of 20% with respect to the

Variable	I	II	III	IV
	value of the base year	value of the base year	value of the base year	value of the base year

Source: Own elaboration.

In the next table, we present the results obtained for the Net Present Value of the Program in the simulations of the sensitivity analysis. Each scenario was running with four different discounts rates (10%, 12%, 14% and 16%).

Table 7 Net Present value (NPV) and Economic rate of return for the scenarios of the sensitivity analysis.

	Reduction of 5%	Reduction of 10%	Reduction of 15%	Reduction of 20%
Discount Rate (10%)	$ 1,42	$ 1,02	$ 0,63	$ 0,30
Discount Rate (12%)	$ 0,93	$ 0,58	$ 0,23	-$ 0,07
Discount Rate (14%)	$ 0,52	$ 0,20	-$ 0,11	-$ 0,38
Discount Rate (16%)	$ 0,17	$ -0,11	-$ 0,39	-$ 0,63
Economic Rate of Return	17,15%	15,39%	13,62%	12,36%

Source: Own elaboration based on simulations.

Table 7 shows that the Program continues to maintain a positive Net Present Value even if the impact of the program was 15% less than projected in the case of discount rates of 10% or 12%. With higher discount rates or with reductions higher than 15% in the output variables, the net present value turn to negative values but the economic rate of return still remains positive.

Conclusions

With a discount rate of 12%, the project has a net present value of US$ 1,28 million and an economic rate of return (ERR) of 18,98% in a 8-year horizon. The Net Present Value remains positive even if the impact of the program was 15% less than projected in the case of discount rates of 10% or 12%.

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